

Specific examples of the unsaturated double bond-containing monomer convertible to the above-described structural unit comprising an organic silicone group represented by the general formula (I) include styrylethyl trimethoxysilane, 4-trimethoxysilylstyrene, 3-(N-styrylmethyl-2-aminoethylamino)propyltrimethoxysilane, vinyltrimethoxysilane, vinyltris-(β -methoxyethoxy)silane, allyltrimethoxysilane, vinyltriacetoxysilane, allyltriacetoxysilane, vinylmethyldimethoxysilane, vinyldimethylmethoxysilane, vinylmethyldiethoxysilane, vinyldimethylethoxysilane, vinylmethyldiacetoxysilane, vinyldimethylacetoxysilane, vinylisobutyldimethoxysilane, vinyltriisopropoxysilane, vinyltributoxysilane, vinyltrihexyloxysilane, vinylmethoxydihexyloxysilane, vinyldimethoxyoctyloxysilane, vinylmethoxydioctyloxysilane, vinyltrioctyloxysilane, vinylmethoxydilauryloxysilane, vinyldimethoxylauryloxysilane, vinylmethoxydioleyloxysilane, vinyldimethoxyoleyloxysilane, 3-(meth)acryloyloxypropyltrimethoxysilane, 3-(meth)acryloyloxypropyltriethoxysilane, 3-(meth)acrylamide-propyltrimethoxysilane, 3-(meth)acrylamide-propyltriethoxysilane, 3-(meth)acrylamide-propyltri(β -methoxyethoxy)silane, 2-(meth)acrylamide-2-methylpropyltrimethoxysilane, 2-(meth)acrylamide-2-methylethyltrimethoxysilane, ~~N-(2-(meth)acrylamide-ethyl)-aminopropyltrimethoxysilane~~
N-(2-(meth)acrylamide-ethyl)-aminopropyltrimethoxysilane,

~~3-(meth)acylamide-propyltriacetoxysilane~~ 3-(meth)acrylamide-propyltriacetoxysilane,
~~2-(meth)acylamide-ethyltrimethoxysilane~~ 2-(meth)acrylamide-ethyltrimethoxysilane,
~~1-(meth)acylamide-methyltrimethoxysilane~~ 1-(meth)acrylamide-methyltrimethoxysilane,
~~3-(meth)acylamide-propylmethyldimethoxysilane~~
3-(meth)acrylamide-propylmethyldimethoxysilane,
~~3-(meth)acylamide-propyldimethylmethoxysilane~~
3-(meth)acrylamide-propyldimethylmethoxysilane,
~~3-(N-methyl-(meth)acylamide)-propyltrimethoxysilane~~
3-(N-methyl-(meth)acrylamide)-propyltrimethoxysilane,
~~3-((meth)acylamide-methoxy)-3-hydroxypropyltrimethoxysilane~~
3-((meth)acrylamide-methoxy)-3-hydroxypropyltrimethoxysilane,
~~3-((meth)acylamide-methoxy)-propyltrimethoxysilane~~
3-((meth)acrylamide-methoxy)-propyltrimethoxysilane,
~~dimethyl-3-(meth)acylamide-propyl-3-(trimethoxysilyl)-propylammonium~~
dimethyl-3-(meth)acrylamide-propyl-3-(trimethoxysilyl)-propylammonium chloride, and
~~dimethyl-2-(meth)acylamide-2-methylpropyl-3-(trimethoxy-silyl)-propylammonium~~
dimethyl-2-(meth)acrylamide-2-methylpropyl-3-(trimethoxy-silyl)-propylammonium
chloride.

Please replace the paragraph beginning at page 18, line 1, with the following amended paragraph:

(A) Acrylic acid esters: Examples of this monomer group

include (substituted) acrylic acid esters such as methyl acrylate, ethyl acrylate, propyl acrylate, butyl acrylate, amyl acrylate, hexyl acrylate, cyclohexyl acrylate, octyl acrylate, phenyl acrylate, benzyl acrylate, 2-chloroethyl acrylate, 2-hydroxyethyl acrylate, 4-hydroxybutyl acrylate, ~~glycidyl~~ glycidyl acrylate, N-dimethylaminoethyl acrylate, and o-, m- and p-hydroxyphenyl acrylate.

Please replace the paragraph beginning at page 18, line 9, with the following amended paragraph:

(B) Methacrylic acid esters: Examples of this monomer group include (substituted) methacrylic acid esters such as methyl methacrylate, ethyl methacrylate, propyl methacrylate, butyl methacrylate, amyl methacrylate, hexyl methacrylate, cyclohexyl methacrylate, octyl methacrylate, phenyl methacrylate, benzyl methacrylate, 2-chloroethyl methacrylate, 2-hydroxyethyl methacrylate, 4-hydroxybutyl methacrylate, ~~glycidyl~~ glycidyl methacrylate, N-dimethylaminoethyl methacrylate, and o-, m- and p-hydroxyphenyl methacrylate.

Please replace the paragraph beginning at page 18, line 18, and ending on page 19, line 5, with the following amended paragraph:

(C) Acrylamides and methacrylamides: Examples of this monomer group include acrylamides and methacrylamides such as ~~acrylamide~~ acrylamide, methacrylamide, N-methylolacrylamide, N-methylolmethacrylamide, N-ethylacrylamide, N-ethylmethacrylamide, N-hexylacrylamide, N-hexylmethacrylamide,

N-cyclohexylacrylamide, N-cyclohexylmethacrylamide, N-hydroxyethylacrylamide, N-phenylacrylamide, N-phenylmethacrylamide, N-benzylacrylamide, N-benzylmethacrylamide, N-nitrophenylacrylamide, N-nitrophenylmethacrylamide, N-ethyl-N-phenylacrylamide, N-ethyl-N-phenylmethacrylamide, N-(4-hydroxyphenyl)acrylamide, and N-(4-hydroxyphenyl)methacrylamide.

Please replace the paragraph beginning at page 19, line 21, with the following amended paragraph:

(I) N-containing monomers. Examples of this monomer group include N-vinylpyrrolidone, N-vinylcarbazol, 4-vinylpyridine, acrylonitrile and ~~methacrylnitrile~~ methacrylonitrile.

Please replace the paragraph beginning at page 20, line 1, with the following amended paragraph:

(J) Unsaturated ~~sulfonamides~~ sulfonamides: Examples of this monomer group include unsaturated sulfonamides, e.g., acrylamides such as N-(o-aminosulfonylphenyl)acrylamide, N-(m-aminosulfonylphenyl)acrylamide, N-(p-aminosulfonylphenyl)acrylamide, N-[1-(3-aminosulfonyl)naphthyl]acrylamide N-[1-(3-aminosulfonyl)naphthyl]acrylamide, and N-(2-aminosulfonylethyl)acrylamide; methacrylamides such as N-(o-aminosulfonylphenyl)methacrylamide, N-(m-aminosulfonylphenyl)methacrylamide, N-(p-aminosulfonylphenyl)methacrylamide, N-[1-(3-aminosulfonyl)naphthyl]methacrylamide, and

N-(2-aminosulfonylethyl)methacrylamide; acrylic acid esters such as o-aminosulfonylphenyl acrylate, m-aminosulfonylphenyl acrylate, p-aminosulfonylphenyl acrylate, and 1-(3-aminosulfonylnaphthyl)acrylate; o-aminosulfonylphenyl methacrylate, m-aminosulfonylphenyl methacrylate, p-aminosulfonylphenyl methacrylate, and 1-(3-aminosulfonylnaphthyl)methacrylate.

Please replace the paragraph beginning at page 24, line 13, with the following amended paragraph:

In the process for producing polymer fine particles of the present invention, in order to enhance dispersion stability, a water-soluble resin can be preferably used. As such a water-soluble resin, for example, may be exemplified polyvinyl alcohol (PVA), modified PVA such as carboxy-modified PVA, polyacrylamide and the copolymers thereof, ~~polydimethylacryamide~~ polydimethylacrylamide, polyacrylamide, polyoxazoline, acrylic acid copolymers, polyvinylmethyl ether, vinylmethyl ether/maleic anhydride copolymer, polyvinyl pyrrolidone, vinyl acetate/crotonic acid copolymer, polyacrylic acid, water-soluble urethane resins, polyethylene glycol, polypropylene glycol, N-vinylcarboxylic amide polymer, and polyethylene imine.

Please replace the paragraph beginning at page 29, line 8, with the following amended paragraph:

As a surfactant to be used in the process for producing polymer fine particles of the present invention, may be exemplified, in addition to nonionic and anionic surfactants,

cationic surfactants as described in JP-A-2-195356, ~~fluorine-containing~~ fluorine-containing surfactants, amphoteric surfactants described in JP-A-59-121044 and JP-A-4-13149.

Please replace the paragraph beginning at page 30, line 22, with the following amended paragraph:

Specific examples of the fluorine-containing surfactant include perfluoroalkyl carboxylates, perfluoroalkyl phosphates, perfluoroalkyl trimethylammonium salts, perfluoroalkyl ~~betains~~ betaines, perfluoroalkyl amineoxides and perfluoroalkyl EO adducts.

Please replace the paragraph beginning at page 35, line 1, with the following amended paragraph:

The above-described hydrophilic resin is preferably used by crosslinking the same. In such a case, as a water-resisting agent for hardening a resin, may be exemplified aldehydes such as glyoxal, melamine-formaldehyde resin, and urea-formaldehyde resin; methylol compounds such as N-methylol urea, N-methylol melamine and methylol polyamide resin; active vinyl compounds such as divinyl sulfone and bis(β -hydroxyethyl sulfonic acid); epoxy compounds such as epichlorohydrin, ~~polyethylene~~ polyethylene glycol diglycidyl ether, polyamide/polyamine/epichlorohydrin adduct and ~~polyamideepichlorohydrin~~ polyamide/epichlorohydrin resin; ester compounds such as ~~monoethanoic~~ monochloroacetic acid ester and thioglycolic acid ester; polycarboxylic acids such as polyacrylic acid and methylvinyl ether/maleic acid copolymerized products;

inorganic crosslinking agents such as boric acid, titanyl sulfonate, Cu, Al, Sn, V, Cr salts; modified polyamide polyimide resins.

Please replace the paragraph beginning at page 38, line 15, and ending on page 40, line 12, with the following amended paragraph:

A hydrocarbon group or a hetero-ring group represented by R^0 in formula (IV) represents, for example, a straight-chain or branched-chain alkyl group having 1 to 12 carbon atoms, which may be substituted [e.g., methyl, ethyl, propyl, butyl, pentyl, hexyl, heptyl, octyl, nonyl, decyl and dodecyl (as a group to be substituted with these groups, may be exemplified a halogen atom (chlorine atom, fluorine atom, bromine atom), hydroxyl, thiol, carboxyl, sulfo, cyano, epoxy, -OR' (R' represents methyl, ethyl, propyl, butyl, heptyl, hexyl, octyl, decyl, propenyl, butenyl, hexenyl, octenyl, 2-hydroxyethyl, 3-chloropropyl, 2-cyanoethyl, N,N-dimethylaminoethyl, 2-bromoethyl, 2-(2-methoxyethyl)oxyethyl, 2-methoxycarbonyl, 3-carboxypropyl, benzyl), -OCOR', -COOR', -COR', -N(R'')(R'') (R'' represents a hydrogen atom or has the same meaning as that of the above-described R', and R''s may be the same or different), -NHCONHR', -NHCOOR', -Si(R')₃, -CONHR'', and -NHCOR', these substituents may be substituted with alkyl groups in plural numbers]; a straight-chain or branched-chain alkenyl group having 2 to 12 carbon atoms, which may be substituted (e.g., vinyl, propenyl, butenyl, pentenyl, hexenyl, octenyl, decenyl and dodecenyl, the substituents of these groups are the same as those substituted with the above-described alkyl groups); an aralkyl group having 7 to 14 carbon atoms, which may be substituted (e.g., benzyl, ~~phenetyl~~ phenethyl).

3-phenylpropyl, ~~naphthylmethyl~~ naphthylmethyl and 2-naphthylethyl, the substituents of these groups are the same as those substituted with the above-described alkyl groups, and plural number of groups can be substituted); an alicyclic group having 5 to 10 carbon atoms, which may be substituted (e.g., cyclopentyl, cyclohexyl, 2-cyclohexylethyl, 2-cyclopentylethyl, norbornyl and adamantyl, the substituents of these groups are the same as ~~substituents~~ substituents in the above-described alkyl groups, and plural number of groups can be substituted); an aryl group having 6 to 12 carbon atoms, which may be substituted (e.g., a phenyl and naphthyl group, the substituents of these groups are the same as those substituted with the above-described alkyl groups, and plural number of groups can be substituted); a hetero ring group comprising at least one kind of atom(s) selected from the group consisting of a nitrogen atom, an oxygen atom and a sulfur atom, which may be condensed (Examples of the hetero ring include ~~apyan~~ pyran, furan, thiophene, morpholine, ~~pyrol~~ pyrrole, thiazole, oxazole, pyridine, piperidine, pyrrolidone, benzothiazole, ~~benzoxazole~~ benzoxazole, quinoline, and ~~tetrahydrofuran~~ tetrahydrofuran, which can be substituted, the substituents of these groups are the same as those substituted with the above-described alkyl groups, and plural number of groups can be substituted).

Please replace the paragraph beginning at page 41, line 16, and ending on page 42, line 21, with the following amended paragraph:

Namely, may be exemplified tetrachlorosilane, tetramethoxysilane, tetraethoxysilane, tetraisopropoxysilane, tetra-n-propylsilane, methyltrichlorosilane, methyltrimethoxysilane, methyltriethoxysilane, ~~ethyltrichlorosilane~~ ethyltrichlorosilane,

ethyltrimethoxysilane, ethyltriethoxysilane, n-propyltrichlorosilane,
n-propyltribromosilane, n-propyltrimethoxysilane, n-propyltriethoxysilane,
n-decyltrimethoxysilane, ~~n-hexyltrichlorosilane~~ n-hexyltrichlorosilane,
n-hexyltrimethoxysilane, ~~phenyltrichlorosilane~~ phenyltrichlorosilane,
phenyltrimethoxysilane, phenyltriethoxysilane, dimethoxydiethoxysilane,
~~dimethyldichlorosilane~~ dimethyldichlorosilane, dimethyldimethoxysilane,
dimethyldiethoxysilane, diphenyldiethoxysilane, phenylmethyldimethoxysilane,
triethoxyhydroxysilane, trimethoxyhydroxysilane, vinyltrichlorosilane,
vinyltrimethoxysilane, trifluoropropyltrichlorosilane, trifluoropropyltrimethoxysilane,
 γ -glycidoxypropylmethyldimethoxysilane, γ -glycidoxypropylmethyldiethoxysilane,
 γ -glycidoxypropyltrimethoxysilane, γ -glycidoxypropyltriethoxysilane,
 γ -methacryloylpropylmethyltrimethoxysilane, ~~γ -methacryloxypropyltri-t-butoxysilane~~
 γ -methacryloxypropyltri-t-butoxysilane, γ -aminopropylmethyldimethoxysilane,
 γ -aminopropylmethyldiethoxysilane, γ -aminopropyltriethoxysilane,
 γ -mercaptopropylmethyldimethoxysilane, γ -mercaptopropylmethyldiethoxysilane,
 γ -mercaptopropyltrimethoxysilane, γ -mercaptopropyltriethoxysilane, and
 β -3,4-epoxycyclohexyl)ethyltrimethoxysilane.

Please replace the paragraph beginning at page 45, line 1, with the following amended paragraph:

In the image-recording layer of the lithographic printing ~~original sheet~~ original sheet of the present invention, in addition to polymer fine particles and a hydrophilic binder, can

be added a light-to-heat converting agent which generates heat upon absorbing light and other various compounds for achieving various objects, e.g., inorganic fine particles, surfactants and colorants for improving sensitivity, controlling the degree of hydrophilic property, improving physical strength of the image-recording layer, improving mutual dispersibility of compositions constituting a layer, improving coating ability, improving printability and convenience in a plate-making workability. Regarding these additives, explanation will be described below.

Please replace the paragraph beginning at page 46, line 9, with the following amended paragraph:

In addition to the above-described metal compounds and metals, nonmetallic particles made of a single ~~substance~~ substance such as carbon black, graphite and bone black, and various kinds of organic and inorganic pigments also can be included in the image-recording layer as light-to-heat convertible fine particles. Further, a light-to-heat convertible dye which does not have a particle form also can be added to the image-recording layer.

Please replace the paragraph beginning at page 46, line 17, and ending on page 47, line 6, with the following amended paragraph:

A dye to be included as a light-to-heat converting agent in the image-recording layer has a light absorption region in an optical wavelength region of an irradiated light and also has a light absorption region in an optical wavelength region of a solid particulate

pigment dispersible in a binder resin and an irradiated light. Further, the dye is a molecular-dispersible one which can or cannot dye to a binder resin. A preferable solid particulate dyeing and molecular-dispersible dye is an IR (infrared ray) absorbing agent. Specifically, may be exemplified dyes selected from the group consisting of ~~polymethin~~ polymethine dye, cyanine dye, squarylium dye, pyrylium dye, diimmonium dye, phthalocyanine compound, triarylmethane dye, and metallic dithiolene. Of these dyes, more preferred are ~~polymethin~~ polymethine dye, cyanine dye, squarylium dye, pyrylium dye, diimmonium dye and phthalocyanine compound.

Please replace the paragraph beginning at page 47, line 7, with the following amended paragraph:

In particular, in view of synthesis suitability, ~~polymethin~~ polymethine dye, cyanine dye, and phthalocyanine compound are most preferable. The above-described dyes can be water-soluble dyes having water-soluble groups inside the molecules. As preferable water-soluble groups of water-soluble dyes, a sulfonic group, a carboxyl group and a phosphonic group may be exemplified.

Please replace the paragraph beginning at page 57, line 9, with the following amended paragraph:

Next, as the resin having hydrophilic property, specifically, may be exemplified polyvinyl alcohol (PVA), modified PVAs such as carboxy-modified PVA; starch and derivatives thereof; cellulose derivatives such as carboxymethyl cellulose and hydroxyethyl

cellulose; ammonium alginate, water-soluble resins such as polyacrylic acid, polyacrylic acid salt, polyethylene oxide, water-soluble urethane resin, water-soluble polyester resin, ~~polyhydroxyethyl~~ polyhydroxyethyl acrylate, polyethylene glycol diacrylate-based polymer, N-vinylcarboxylic amide polymer, casein, gelatin, polyvinylpyrrolidone, vinyl acetate-crotonic acid copolymer, and styrene-maleic acid copolymer.

Please replace the paragraph beginning at page 61, line 11, and ending on page 62, line 2, with the following amended paragraph:

Specifically, may be exemplified polyvinyl alcohol (PVA), modified PVAs such as carboxy-modified PVA, gum arabic, water-soluble soybean polysaccharides, polyacrylamide and copolymers thereof, acrylic acid copolymers, vinylmethyl ether/maleic anhydride copolymer, vinyl acetate/maleic anhydride copolymer, styrene/maleic anhydride copolymer, roasted dextrin, oxygen-decomposed dextrin, oxygen-decomposed etherified dextrin, starch and derivatives thereof, cellulose derivatives such as carboxymethyl cellulose, carboxyethyl cellulose, methyl cellulose and hydroxyethyl cellulose, casein, gelatin, polyvinylpyrrolidone, vinyl acetate-crotonic acid copolymer, styrene-maleic acid copolymer, alginic acid and alkali metal salts thereof, alkali earth metal salts or ammonium salts thereof, polyacrylic acid, poly(ethylene oxide), water-soluble urethane resin, water-soluble polyester resin, ~~polyhydroxyethyl~~ polyhydroxyethyl acrylate, polyethylene glycol, polypropylene glycol, and N-vinylcarboxylic amide polymer.

Please replace the paragraph beginning at page 65, line 4, with the following amended paragraph:

As the support, a material in the form of plate having a stable dimension is used. Examples of the support to be used in the present invention include a paper, a paper laminated with plastic (e.g., polyethylene, polypropylene and polystyrene), a metal plate (e.g., aluminum, zinc, lead, copper, nickel and stainless steel), plastic film (e.g., cellulose diacetate, ~~cellulose~~ cellulose triacetate, cellulose propionate, cellulose butyrate, cellulose acetate butyrate, cellulose nitrate, polyethylene terephthalate, polyethylene, polystyrene, polypropylene, polycarbonate and polyvinyl acetal), and a paper or a plastic film on which the above-described metal is laminated or vapor-deposited.

Please replace the paragraph beginning at page 65, line 16, with the following amended paragraph:

As a ~~preferably~~ preferable support, a polyester film, an aluminum plate or a SUS steel plate which is less apt to be corroded on a printing plate may be exemplified. Of these, an aluminum plate having a stable dimension and which is relatively ~~cheap~~ inexpensive is preferable.

Please replace the paragraph beginning at page 65, line 20, and ending on page 66, line 12, with the following amended paragraph:

A ~~preferably~~ preferable aluminum plate is a pure aluminum plate and an alloy plate mainly comprising aluminum, and also including a micro amount of a foreign element. Also can be used a plastic film on which aluminum is laminated or vapor-deposited. Examples of a foreign element included in an aluminum alloy include silicon, iron, manganese, copper, magnesium, ~~chromium~~ chromium, zinc, bismuth, nickel and titanium. A content of a foreign element in an alloy is at most 10% by weight or less. In the present invention, an especially preferable aluminum is pure aluminum. However, completely pure aluminum is difficult to be produced in view of refining technique. Therefore, aluminum including a little amount of a foreign element can be used. Thus, an aluminum plate applicable to the present invention does not have a specified composition, and a conventionally known material of aluminum plate can be optionally utilized. A thickness of a support to be used in the present invention is about 0.05 to 0.6 mm, preferably 0.1 to 0.4 mm, and especially preferably 0.15 to 0.3 mm.

Please replace the paragraph beginning at page 69, line 12, with the following amended paragraph:

As the silane coupling agent, may be exemplified γ -chloropropyl trimethoxysilane, vinyltrimethoxysilane, vinyltriethoxysilane, vinyltris(β -methoxyethoxy)silane, γ -methachloxypropyl trimethoxysilane, γ -glycoxidoxypropyl trimethoxysilane,

~~γ -ureidopropyl~~ γ -aminopropyl triethoxysilane, γ -mercaptoptrimethoxysilane, ~~γ -ureidopropyl~~ γ -ureidopropyl triethoxysilane and N-(β -aminoethyl)-(β -aminopropyl)dimethoxysilane.

Please replace the paragraph beginning at page 76, line 12, with the following amended paragraph:

An aluminum material of JISA105 comprising aluminum 99.5% by weight, copper 0.01% by weight, titanium 0.03% by weight, iron 0.3% by weight and silicon 0.1% by weight was rolled to have a thickness of 0.24 mm. The surface of the resulting rolled plate was subjected to graining using 20% by weight of an aqueous suspension of 400 mesh ~~Pumice~~ Pumice stone (produced by Kyoritsu Yogyo (ceramics)) and rolling brush (6, 10 nylon), followed by adequately washing.

Please replace the paragraph beginning at page 100, line 1, with the following amended paragraph:

The ~~entire~~ entire disclosure of each and every foreign patent application from which the benefit of foreign priority has been claimed in the present application is incorporated herein by reference, as if fully set forth herein.